the AUX port. Upon receipt of such data, the X-10 unit would transmit data to an X-10 receiver switch module used to supply AC power to each print server. Upon receipt of a command addressed to a specific X-10 switch module, AC power for that switch module would be interrupted. Upon receipt of a second command addressed to that switch module power would be restored.

Second, this AUX port could be used establish a linkage between the Host Unit and the network monitoring and trouble alert apparatus ("Alert System") such as an apparatus like that described in U.S. patent application Ser. No. 07/966,081 filed Oct. 23, 1992 now U.S. Pat. No. 5,566,339 and assigned to assignee of the present invention, the contents of which are incorporated by reference herein. In this case, the "Alert System" could share a common phone line linkage with Host Unit(s) at a Host Site. In addition, a special "Y" style serial cable interface would permit the Alert System to continue to transmit and receive serial data in the same manner, as well as link the Alert System's serial port to the AUX port of Host Unit 00.

When an alert is received from the Alert System, the person receiving the alert could enter a pre-set code using the keys on their touch tone phone indicating that the Alert System should suspend processing until a second confirming tone is received from a Remote PC's modem. Then, the person receiving the alert would activate the TVLINK.EXE program on their Remote PC to access the Host Site via a direct access (see narrative for Block 711) procedure. The TVLINK.EXE program would then instruct the Remote PC's modem to go off-hook and issue an audible touch tone code indicating the Remote PC was ready for the direct connection. Upon hearing this audible touch tone the remote user would hang up the telephone (at which point the Remote PC will still hold the line connection via the PC's modem's direct connect status). Once the confirming touch tone was received by the Alert System, the Alert System would send a pre-set signal out of it's serial port to the AUX port of Host Unit 00 instructing the Host Unit tell it's modem to go off-hook (and thereby complete the direct connection to the Remote PC). Upon receiving this serial signal, the Host Unit's Control CPU would send commands out of the Data Out port to the Host Unit's modem instructing the modem to go off hook and issue a preset touch tone confirming the Host Unit had taken the modem off hook. When the expected touch tones from the Host Unit's modem are detected by the Alert System, the Alert System would cancel any pending phone alerts and go on-hook. At this point, a successful direct connection between a Remote PC and a Host Site has been accomplished after alert is received without losing the phone connection.

Synchronizing Host Unit access and Alert System processing, as described, (1) permits both the Alert System and Host Unit to successfully share the same phone line and thereby minimize phone line costs, (2) prevents situations where both a Remote PC and Alert system share the same phone line and the Remote PC cannot access a Host Unit because the Alert System is using the phone line to issue alerts, (3) minimizes situations where both a Remote PC and Alert system share the same phone line and the Alert System interferes with the Remote PC's connection to the Host PC by continuing to interrupt the phone line by attempting to issue pending alerts, and (4) insures the fastest possible access to Host PC's in the event an alert is issued by the Alert System.

We claim:

1. A computer monitoring system for monitoring information displayed on a video display terminal connected to,

and receiving display information from. a data processing device comprising:

video raster signal input means for receiving a video raster signal representative of said information displayed on the video display terminal from the data processing device: and

conversion means connected to said video raster signal input means for converting said video raster signal into a digital signal representative of said information contained in said video raster signals.

said conversion means comprising character determination means for determining an identity of each character displayed on the video display terminal and for generating a digital code indicative of said identity of said each character displayed on the video display terminal.

said character determination means comprising circuitry for generating a series of cyclic redundancy checks. wherein each said cyclic redundancy check is generated from pixel information associated with each character location on the video display terminal.

2. The system of claim 1 further comprising transmission means connected with said conversion means for transmitting said digital code to a remote location.

3. The system of claim 2 further comprising:

reception means at said remote location connected with said transmission means for receiving said digital code transmitted by said transmission means; and

remote video display means connected with said reception means for displaying said digital code received from said reception means. said remote video display means showing an image substantially the same as that shown on the video display terminal to allow a user to determine the operational status of the data processing device.

4. The system of claim 3 wherein said digital code is transmitted to said remote location in response to a command received from said remote location requesting that said digital code be transmitted.

5. The system of claim 4 further comprising interconnection means for interconnecting a plurality of said computer monitoring systems with one another and for allowing a user at said remote location to selectively access any one of said computer monitoring systems.

6. The system of claim 1 further comprising:

memory means connected with said conversion means for storing said digital code to retain an image of said information displayed on the video display terminal; and

control means connected to said memory means and said conversion means for monitoring changes to said image and for storing said digital code representative of said changes in said memory means. such that said memory means contains a series of image frames that can be used by an operator to determine the cause of a system failure.

7. The system of claim 1 further comprising:

training means connected to said character determination means for generating a predetermined character display. for operating said character determination means to generate digital codes representative of an identity of each character in said predetermined character display. and for storing said digital codes generated by said character determination means; and

comparison means connected with said training means and said character determination means for comparing

digital codes generated by said character determination means for an unknown display on said video display terminal with said digital codes representative of each character on said predetermined display, such that said identity of each character displayed on said unknown display can be determined.

8. The system of claim 1 further comprising:

synchronization signal input means for receiving from the data processing device a horizontal synchronization signal; and

pixel clock generating means connected with said synchronization signal input means and said conversion means for generating a pixel clock signal.

9. The system of claim 1 wherein said data processing device is a personal computer, and said video raster signal input means comprises a circuit interconnected between said personal computer and the video display terminal.

10. The system of claim 2 wherein said transmission means comprises a standard public switched telephone line.

11. A method of receiving, analyzing and converting information contained in an analog video raster signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information comprising the steps of:

receiving the analog video raster signal generated by the data processing device;

converting said analog video raster signal into a digital signal representative of said information contained in said video raster signal.

said converting step including the steps of:

determining an identity of each character displayed on the video display terminal; and

generating a digital code indicative of said identity of said each character displayed on the video display terminal.

wherein said step of generating a digital code comprises the step of generating a series of cyclic redundancy checks from pixel information associated with each character location on the video display terminal.

12. The method of claim 11 further comprising the step of transmitting said digital codes to a remote location.

13. The method of claim 12 further comprising the steps of:

receiving said digital codes transmitted to said remote location; and

displaying said digital codes to create an image substantially the same as that shown on the video display terminal to allow a user to determine an operational status of the data processing device.

14. The method of claim 13 wherein said step of transmitting said digital codes to said remote location is performed in response to a command received from said remote location requesting that said digital codes be transmitted.

15. The method of claim 12 wherein said digital codes are transmitted to said remote location using a standard public switched telephone line.

16. The method of claim 11 further comprising the steps of:

analyzing a predetermined character sequence displayed on the video display terminal to determine an identity of each character displayed on said video display terminal;

generating a digital code representative of each character in said predetermined character sequence displayed on said video display terminal; and

storing said digital codes in a memory.

17. The method of claim 11 further comprising the steps of:

receiving a horizontal synchronization signal from the data processing device; and

generating a pixel dock signal in synchronization with said horizontal synchronization signal.

18. The method of claim 11 wherein said data processing device is a personal computer, and said video raster signal is intercepted between said personal computer and the video display terminal.

19. A computer implemented method of converting information contained in a video raster signal generated by a data processing device and displayed on a video display terminal associated with the data processing device, into a digital representation of that information comprising the computer implemented steps of:

receiving the video raster signal generated by the data processing device; and

converting said video raster signal into a digital signal representative of said information contained in said video raster signal,

said converting step including the steps of:

determining an identity of each character displayed on the video display terminal; and

generating a digital code indicative of said identity of said each character displayed on the video display terminal,

wherein said step of generating a digital code comprises the step of generating a series of cyclic redundancy checks from pixel information associated with each character location on the video display terminal.

20. A computer monitoring system for monitoring information contained in an analog video raster signal generated by a data processing device and displayed on a video display terminal connected to the data processing device and for convening the information contained in the analog video raster signal into a digital representation of that information for transmission to a remote location comprising:

analog video raster signal input means connected with the data processing device for receiving said analog video raster signal generated by said data processing device;

conversion means connected to said analog video raster signal input means for receiving said analog video raster signal and for converting said analog video raster signal into a digital signal comprising a plurality of digital codes representative of information contained in said analog video raster signal, said conversion means comprising processing means for analyzing said analog video raster signal, for determining an identity of each character displayed on the video display terminal, and for generating at least one of said plurality of digital codes, said at least one of said plurality of digital codes being indicative of said identity of said each character displayed on the video display terminal.

21. A computer monitoring system for monitoring information contained in an analog video raster signal generated by a data processing device and displayed on a video display terminal connected to the data processing device and for converting the information contained in the analog video raster signal into a digital representation of that information for transmission to a remote location comprising:

analog video raster signal input means connected with the data processing device for receiving said analog video raster signal generated by said data processing device;

conversion means connected to said analog video raster signal input means for receiving said analog video raster signal and for converting said analog video raster signal into a digital signal comprising a plurality of digital codes representative of information contained in said analog video raster signal, said conversion means comprising processing means for analyzing said analog video raster signal, character determination means for determining an identity of each character displayed on the video display terminal and for generating a digital code indicative of said identity of said each character displayed on the video display terminal and for generating at least one of said plurality of digital codes, said

at least one of said plurality of digital codes being indicative of said identity of said each character displayed on the video display terminal; and

training means connected to said character determination means for generating a predetermined character display, for operating said character determination means to generate digital codes representative of an identity of each character in said predetermined character display, and for storing said digital codes generated by said character determination means.

* * * * *

22. A system for connecting a workstation of the type that includes a keyboard, a cursor control device, and a video monitor to one or more remotely located computers, comprising:

a programmable switch for routing workstation input signals produced by at least one of the keyboard and cursor control device of the workstation to a remotely located computer;

a first signal conditioner for receiving the workstation input signals and for transmitting the workstation input signals to an input of the switch, the first signal conditioner also including an on-screen programming processor that produces overlaid video signals on the video monitor of the workstation, means for detecting workstation input signals entered in response to the overlaid video signals, and means for transmitting the workstation input signals entered in response to the overlaid video signals to the switch in order to control the operation of the switch; and

a second signal conditioner which receives the workstation input signals from an output of the switch and supplies the workstation input signals to the remotely located computer.

23. A system for connecting a workstation of the type that includes a keyboard, a cursor control device, and a video monitor to a number of remotely located computers, comprising:

a central programmable switch for connecting signals received on a number of inputs to a number of outputs;

a first signal conditioning circuit for receiving signals produced by the keyboard and cursor control device of the workstation and for transmitting the keyboard and cursor control device signals to an input of the central switch, the first signal conditioning circuit also including an on-screen programming circuit that produces overlaid video signals on the video monitor of the workstation, means for detecting keyboard and cursor control device signals entered in

response to the overlaid video signals, and means for transmitting the keyboard and cursor control signal entered in response to the overlaid video signals to the central switch in order to control the operation of the central switch; and

a second signal conditioning circuit coupled to the remotely located computers for receiving the keyboard and cursor control device signals from an output of the central switch and for supplying the keyboard and cursor control signals to at least one of the remote computers.

24. The system of claim 23, wherein the second signal conditioning circuit receives video signals produced by the remote computer system and transmits the video signals to the central switch which routes the video signals to the first signal conditioning unit, wherein the first signal conditioning unit receives the video signals from the central switch and applies the video signals to the video monitor of the workstation.

25. A system for connecting a workstation to one or more remotely located computers, the workstation being of the type that includes a video monitor and at least one of a keyboard and a cursor control device, the system comprising:

a programmable switch which routes at least some workstation input signals produced by at least one of the keyboard and cursor control device of the workstation to a remotely located computer; and

on-screen display processor which generates an on-screen display on the video monitor of the workstation and which, in accordance with workstation input signals entered in response to the on-screen display, generates signals which are used to control the programmable switch.

26. The system of claim 25, wherein the on-screen display processor is located at the workstation.

27. The system of claim 25, wherein the programmable switch routes video signals produced by the remotely located computer to the video monitor of the workstation.

28. The system of claim 25, wherein the programmable switch comprises plural switch units, each switch unit being connected to a corresponding one of the plural remotely located computers, the plural switch units being connected in a daisy chain configuration.

29. The system of claim 25, wherein the workstation is connected to the programmable switch by a telephone line whereby the workstation input signals are applied to the programmable switch over the telephone line.

30. The system of claim 25, wherein the workstation is connected to the programmable switch by a serial cable whereby the workstation input signals are applied to the programmable switch over the serial cable.

31. The system of claim 25, wherein the programmable switch is connected to at least one of a keyboard and a cursor control device of the remotely controlled computer where at least one of keyboard and cursor control device signals generated at the remotely located computer are transmitted to the programmable switch, and wherein the programmable switch routes either (1) the at least one of keyboard and cursor device signals generated at the remotely located computer or (2) the workstation input signals to the remotely located computer.

32. The system of claim 25, further comprising a synchronize polarity circuit which converts to negative polarity horizontal and vertical synchronize signals transmitted from the remotely located computer.

33. The system of claim 32, wherein the synchronize polarity circuit comprises an exclusive OR gate.

34. A method of connecting a workstation to one or more remotely located computers, the workstation being of the type that includes a video monitor and at least one of a keyboard and a cursor control device, the method comprising:

routing workstation input signals produced by at least one of the keyboard and cursor control device to a programmable switch, and routing at least some of the workstation input signals from the programmable switch to the remotely located computer;

providing an on-screen display on the video monitor of the workstation; and

in accordance with workstation input signals entered in response to the on-screen display, controlling the programmable switch.

35. The method of claim 34, further comprising routing video signals produced by the remotely located computer through the programmable switch to the video monitor of the workstation.

36. The method of claim 34, wherein the step of routing the workstation input signals to the programmable switch comprises routing the workstation input signals to one of plural switch units comprising the programmable switch, the plural switch units each being connected to a corresponding one of the remotely located computers, the plural switch units being connected in a daisy chain configuration.

37. The method of claim 34, further comprising transmitting the workstation input signals to the programmable switch over a telephone line.

38. The method of claim 34, further comprising transmitting the workstation input signals to the programmable switch over a serial cable.

39. The method of claim 34, further comprising

applying at least one of keyboard and cursor device signals generated at the remotely located computer to the programmable switch; and then

using the programmable switch to route either (1) the at least one of keyboard and cursor device signals generated at the remotely located computer or (2) the workstation input signals to the remotely located computer.

40. The method of claim 34, wherein the step of controlling the programmable switch includes using the workstation input signals entered in response to the on-screen display to configure the switch for connecting the workstation with a selected one of the remotely located computers.

41. The method of claim 34, further including the step of converting to negative polarity horizontal and vertical synchronize signals transmitted from the remotely located computer.

42. A computer monitoring system comprising:

a host computer which includes a host processor, a host input device, and a host display device;

a remote processor which has a remote display device connected thereto;

a host unit connected between the remote processor and host computer which (1) causes screen data displayed on the host display device to appear also

on the remote display device whereby at least a situation requiring a cold boot operation appears at the remote display device; and (2) upon receipt of a cold boot command from the remote processor, causes the host computer to initiate a cold boot operation of the host processor.

43. The apparatus of claim 42, wherein the screen data displayed on the host display device appears on the remote display device even after lock up of the host processor.

44. The apparatus of claim 42, wherein the host unit is connected between the host computer and a source of power for the host computer, and wherein upon receipt of the cold boot command the host unit temporarily interrupts power to the host processor.

45. The apparatus of claim 42, wherein the remote processor has a remote input device connected thereto, and wherein upon receipt of an input control command from the remote processor, the host unit causes the host processor to accept input from the remote input device and not from the host input device.

46. The apparatus of claim 42, wherein the host unit is connected between the host processor and at least one of the host input device and the host display device.

47. The apparatus of claim 45, wherein the remote processor has a remote input device connected thereto, and wherein the host unit forwards an input signal from one of the host input device and the remote input device to the host processor.

48. The apparatus of claim 42, comprising plural host computers and wherein the host unit comprises a switch controlled by the remote processor whereby the remote processor can select with which of the plural host computers the remote processor is to be connected for the transmission of input signals or display signals therebetween.

49. The apparatus of claim 42, comprising plural host computers and corresponding plural host units, the plural host units being connected in a daisy chain configuration, and wherein the plural host units comprise a switch controlled by the remote processor whereby the remote processor can select with which of the plural host computers the remote processor is to be connected for the transmission of input signals or display signals therebetween.

50. The apparatus of claim 42, wherein the remote processor is connected to the host unit by a standard telecommunications line.

51. A method of monitoring a computer system comprising:

providing a host unit between a host computer and a remote processor; the host computer including a host processor, a host input device, and a host display device; the remote processor having a remote display device connected thereto;

using the host unit to cause screen data displayed on the host display device to appear also on the remote display device whereby at least a situation requiring a cold boot operation appears at the remote display device; and

receiving a cold boot command at the host unit from the remote processor and thereupon causing the host computer to initiate a cold boot operation of the host processor.

52. The method of claim 51, further comprising providing the screen data displayed on the host display device on the remote display device even after lock up of the host processor.

53. The method of claim 51, further comprising:

connecting the host unit between the host computer and a source of power for the host computer, and

upon receipt of the cold boot command at the host unit, temporarily interrupting power to the host processor.

54. The method of claim 51, wherein the remote processor has a remote input device connected thereto, and wherein the method further comprises receiving an input control command from the remote processor and thereupon the host unit causes the host processor to accept input from the remote input device and not from the host input device.

55. The method of claim 51, further comprising connecting the host unit between the host processor and at least one of the host input device and the host display device.

56. The method of claim 55, wherein the remote processor has a remote input device connected thereto, and wherein the method further comprises the host unit forwarding an input signal from one of the host input device and the remote input device to the host processor.

57. The method of claim 51, comprising plural host computers and wherein the host unit comprises a switch controlled by the remote processor, and wherein the method further comprises the remote processor selecting with which

of the plural host computers the remote processor is to be connected for the transmission of input signals or display signals therebetween.

58. The method of claim 51, comprising plural host computers and corresponding plural host units, and wherein the method further comprises connecting the plural host units in a daisy chain configuration wherein the plural host units comprise a switch controlled by the remote processor whereby the remote processor can select with which of the plural host computers the remote processor is to be connected for the transmission of input signals or display signals therebetween.

59. The method of claim 51, further comprising connecting the remote processor to the host unit by a standard telecommunications line.

60. A computer monitoring system comprising:

plural host computers, each host computer having a host processor, a host input device, and a host display device;

a remote processor which has a remote input device and remote display device connected thereto;

a switch comprising plural host units connected together in a daisy chain configuration, each of the plural host units being connected to an associated one of the plural host computers, at least one of the plural host units being connected to the remote processor;

wherein in response to a command entered from the remote input device, the remote processor is connected by the switch to a selected one of the plural host computers whereby at least one of the following occurs:

(1) screen data displayed on the host display device of the selected one of the plural host computers appears also on the remote display device, and

(2) input signals from the remote input device are forwarded to the selected one of the plural host computers for controlling the selected one of the plural host computers.

61. The apparatus of claim 60, wherein the selected one of the plural host computers is connected via its associated host unit to a source of power, and wherein upon receipt of a cold boot command from the remote processor the associated host unit temporarily interrupts power to the selected one of the plural host computers.

62. The apparatus of claim 60, wherein upon receipt of an input control command from the remote processor, the associated host unit causes the host processor of the selected one of the plural host computers to accept input from the remote input device and not from the host input device of the selected one of the plural host computers.

63. The apparatus of claim 60, wherein the associated host unit is connected between the host processor of the selected one of the plural host computers and at least one of the host input device and the host display device of the selected one of the plural host computers.

64. The apparatus of claim 60, wherein the associated host unit forwards an input signal from one of the host input device and the remote input device to the host processor of the selected one of the plural host computers.

65. The apparatus of claim 60, wherein the remote processor is connected to the switch by a standard telecommunications line.

66. A method of monitoring a computer system comprising:

providing a switch between plural host computers and a remote processor; each host computer having a host processor, a host input device, and a host display device; the remote processor having a remote input device and remote display device connected thereto; the switch comprising plural host units connected together in a daisy chain configuration, each of the plural host units being connected to an associated one of the plural host computers, at least one of the plural host units being connected to the remote processor;

upon entry of a command from the remote input device, connecting the remote processor by the switch to a selected one of the plural host computers whereby at least one of the following occurs:

(1) screen data displayed on the host display device of the selected one of the plural host computers appears also on the remote display device, and

(2) input signals from the remote input device are forwarded to the selected one of the plural host computers for controlling the selected one of the plural host computers.

67. The method of claim 66, further comprising:

connecting the selected one of the plural host computers via its associated host unit to a source of power;

upon receipt of a cold boot command from the remote processor, the associated host unit temporarily interrupting power to the selected one of the plural host computers.

68. The method of claim 66, further comprising, upon receipt of an input control command from the remote processor, the associated host unit causing the host processor of the selected one of the plural host computers to accept input from the remote input device and not from the host input device of the selected one of the plural host computers.

69. The method of claim 66, further comprising connecting the associated host unit between the host processor of the selected one of the plural host computers and at least one of the host input device and the host display device of the selected one of the plural host computers.

70. The method of claim 66, further comprising the associated host unit forwarding an input signal from one of the host input device and the remote input device to the host processor of the selected one of the plural host computers.

71. The method of claim 66, further comprising connecting the remote processor to the switch by a standard telecommunications line.

72. A computer monitoring system comprising:

plural host computer sites, each host computer site having at least one host computer, the at least one host computer including a host processor, a host input device, and a host display device;

a remote processor situated at a remote site, the remote processor having a remote display device and a remote input device connected thereto;

a telecommunications network linking the remote site and each of the plural host computer sites, the telecommunications network facilitating a first connection between a first selected host computer at a first host computer site and the remote site, and during the first connection either:

(a) transmitting screen data from the host display device of the first selected host computer so that video appearing at the host display device thereof appears also on the remote display device, and

(b) transmitting input signals from the remote input device to the first selected host computer for controlling the first selected host computer;

an on-screen display process, execution of the on-screen display process at the remote site providing a pop-up screen on the remote display

device, the pop-up comprising a menu identifying the host computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of the first connection; whereupon operation of the remote input device in response to the menu of the pop-up screen establishes a second connection via the telecommunications switching system between a second selected host computer and the remote site.

73. The apparatus of claim 72, wherein the second selected host computer is situated at a second host computer site.

74. The apparatus of claim 72, wherein at least one of the plural host computer sites comprises a network of host computers.

75. The apparatus of claim 74, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers.

76. The apparatus of claim 74, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for each of the host computers the host unit is connected between the host computer and a source of power for the host computer, and wherein upon receipt of the cold boot command from the remote site the host unit temporarily interrupts power to the host processor of the host computer.

77. The apparatus of claim 74, wherein at least one of the plural host computer sites comprises a daisy chained configuration of host computers, the daisy chain configuration including a host unit associated with each of the host computers, wherein for at least one of the host computers the host unit is

connected between the host processor and at least one of the host input device and the host display device of the at least one of the host computers.

78. A method of monitoring a computer system wherein plural host computer sites are connected by a telecommunications network to a remote processor at a remote site, each of the plural host computer sites having at least one host computer, each host computer including a host processor, a host input device, and a host display device; the remote site having a remote processor situated thereat, the remote processor having a remote display device and a remote input device connected thereto; the method comprising:

(1) using a telecommunications switching system of the telecommunications system to establish a first transmission between a first selected host computer at a first host computer site and the remote site, and during the first transmission either:

(a) transmitting screen data from the host display device of the first selected host computer so that video appearing at the host display device thereof appears also on the remote display device, and

(b) transmitting input signals from the remote input device to the first selected host computer for controlling the first selected host computer;

(2) executing an on-screen display process, execution of the on-screen display process providing a pop-up screen on the remote display device, the pop-up comprising a menu identifying the host computers at the plural host computer sites, the pop-up screen at least overlaying the video appearing on the remote display device as a result of step (1)(a);

(3) upon operation of the remote input device in response to the menu of the pop-up screen, establishing a second transmission via the telecommunications switching system between a second selected host computer and the remote site.

79. The method of claim 78, wherein the second selected host computer is situated at a second host computer site.

80. The method of claim 78, further comprising providing at least one of the plural host computer sites with a network of host computers.

81. The method of claim 80, further comprising providing at least one of the plural host computer sites with a daisy chain configuration of host computers.

82. The method of claim 80, further comprising:

providing at least one of the plural host computer sites with a daisy chain configuration of host computers, the step of providing the daisy chain configuration comprising connecting a host unit between each of the host computers and a source of power therefor; and

upon receiving a cold boot command from the remote site with respect to a selected host computer, using the host unit to interrupt temporarily power to the host processor of the selected host computer.

83. The method of claim 80, providing at least one of the plural host computer sites with a daisy chain configuration of host computers, the step of providing the daisy chain configuration comprising connecting a host unit between the host processor and at least one of the host input device and the host display device of the at least one of the host computers.

84. A computer monitoring system comprising:

plural host processors which are to be monitored;

a remote processor situated at a remote site for monitoring of a selected one of the plural host processors, the remote processor having a remote display device and a remote input device connected thereto;

a communication path between a selected one of the plural host processor and the remote processor for transmitting at least one of:

(a) video data from the selected one of the plural host processors for use by the remote display device, and

(b) input signals from the remote input device to the selected one of the plural host processors for controlling the selected one of the plural host processors;

the communication path comprising:

a central processor unit;

a communications line connecting the central processor unit to the remote processor;

a switch connecting the central processing unit to the plural host processors and for establishing communication between the remote processor and the selected one of the plural host processor.

85. The apparatus of claim 84, wherein the central processing unit is included in a first host unit, and wherein the switch comprises plural host units connected in a daisy chain configuration.

86. The apparatus of claim 84, wherein the communications line is a telecommunications line.

87. The apparatus of claim 84, wherein the plural host processors are connected to the switch by conventional cabling without having any intrusive monitoring hardware connected between the switch and the plural host processors.

88. A computer monitoring system comprising:

providing plural host processors which are to be monitored;

providing a remote processor situated at a remote site for monitoring of a selected one of the plural host processors, the remote processor having a remote display device and a remote input device connected thereto;

transmitting, over a communication path between a selected one of the plural host processor and the remote processor, at least one of:

(a) video data from the selected one of the plural host processors for use by the remote display device, and

(b) input signals from the remote input device to the selected one of the plural host processors for controlling the selected one of the plural host processors;

the step of transmitting over the communication path including:

transmitting at least one of the video data and the input signals over a communications line between a central processor unit and the remote processor;

transmitting at least one of the video data and the input signals between the central processor unit and the selected one of the plural host processors via a switch, the switch being connected to the plural host processors.

89. The method of claim 88, wherein the step of transmitting via the switch comprises transmitting at least one of the video data and the input signals through a daisy chain connection of host units.

90. The method of claim 88, wherein the step of transmitting at least one of the video data and the input signals over the communications line between a central processor unit and the remote processor involves transmitting over a telecommunications line.

91. The method of claim 88, comprising connecting the plural host processors to the switch by conventional cabling without having any intrusive

monitoring hardware connected between the switch and the plural host processors.

92. A KVM switch system for providing keyboard, video, and mouse signals to a selected computer, including:

a KVM switch;

an on-screen display processor providing a visual user interface responding to at least some of the keyboard signals for choosing the selected computer.